

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A simulator for verifying the functionality of an electrical product safety tester, said simulator comprising:

a plurality of electrical input/output terminals for connection to a plurality of test terminals on said electrical product safety tester;

a first test path comprising a high voltage input from a first of said plurality of electrical input/output terminals, a first switch, an air gap device designed to arc over at a specific high level voltage, and a second terminal of said plurality of electrical input/output terminals; and an arc view window.

2. (Currently amended) The simulator of Claim 1, further comprising ~~a second~~ an additional test path comprising said high voltage input, a second switch, and said second terminal.

3. (Currently amended) The simulator of Claim 1, further comprising ~~a third~~ an additional test path comprising an input terminal from a third of said plurality of terminals, a third switch, and said second terminal;

4. (Original) The simulator of Claim 1, wherein said air gap device is designed to arc over at about 750V.

5. (Original) The simulator of Claim 1, wherein said air gap device is an engine spark plug.

6. (Original) The simulator of Claim 1, wherein said simulator is portable.

7. (Cancelled)

8. (Currently amended) The simulator of Claim 2, further comprising in said ~~second~~ additional test path a first impedance element in series with said second switch, and a second impedance element in parallel with said series connection of said second switch and said first impedance element.

9. (Currently amended) The simulator of Claim 3, further comprising in said ~~third~~ additional test path a first resistor in parallel with said third switch, and a second resistor in series with said parallel connection of said first resistor and said third switch.

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Currently amended) A method of testing functionality of a production line dielectric withstand tester, comprising:

connecting said production line dielectric withstand tester to a product simulator, said product simulator being configurable to emulate either a passing product or a failing product; and

viewing an arc produced inside said product simulator.

15. (Cancelled)

16. (Original) A product simulator comprising a housing, an arc view window, and at least one switch, wherein an operator can view the break down of an air gap device through said arc view window, and wherein said switch is configured to alter a test path in said product simulator so as to alternatively simulate a product that passes a production line dielectric test and a product that fails a production line dielectric test

17. (Original) The simulator of Claim 16, further comprising a second switch, wherein said second switch is configured to alter a second test path in said product simulator so as to alternatively simulate a product that passes a production line ground continuity test and a product that fails a production line ground continuity test.

18. (Original) The simulator of Claim 16, further comprising a second switch, wherein said second switch is configured to alter a second test path in said product simulator so as to alternatively simulate a product that passes a production line leakage current test and a product that fails a production line leakage current test.

19. (New) A simulator for verifying the functionality of an electrical product safety tester, said simulator comprising:

a plurality of electrical input/output terminals for connection to a plurality of test terminals on said electrical product safety tester;

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a first test path comprising a high voltage input from a first of said plurality of terminals, a first switch, an air gap device designed to arc over at a specific high level voltage, and a second terminal of said plurality of terminals;

wherein said air gap device is designed to arc over at about 750V.

20. (New) A simulator for verifying the functionality of an electrical product safety tester, said simulator comprising:

a plurality of electrical input/output terminals for connection to a plurality of test terminals on said electrical product safety tester;

a first test path comprising a high voltage input from a first of said plurality of terminals, a first switch, an air gap device designed to arc over at a specific high level voltage, and a second terminal of said plurality of terminals;

an additional test path comprising said high voltage input, a second switch, said second terminal, a first impedance element in series with said second switch, and a second impedance element in parallel with said series connection of said second switch and said first impedance element.

21.(New) A simulator for verifying the functionality of an electrical product safety tester, said simulator comprising:

a plurality of electrical input/output terminals for connection to a plurality of test terminals on said electrical product safety tester;

a first test path comprising a high voltage input from a first of said plurality of terminals, a first switch, an air gap device designed to arc over at a specific high level voltage, and a second terminal of said plurality of terminals;

an additional test path comprising an input terminal from a third of said plurality of terminals, a third switch, said second terminal, a first resistor in parallel with said third switch, and a second resistor in series with said parallel connection of said first resistor and said third switch.